

## Vitalie Stavila Publication list

1. A. M. Ullman, J. W. Brown, M. E. Foster, F. Léonard, K. Leong, V. Stavila, M. D. Allendorf. *Inorganic Chemistry* 55 (15), 7233 (2016)  
“Transforming MOFs for Energy Applications Using the Guest@ MOF Concept”
2. K.J. Erickson, F. Léonard, V. Stavila, M.E. Foster, C.D. Spataru, R.E. Jones, B.M. Foley, P.E. Hopkins, M.D. Allendorf, and A.A. Talin. *Advanced Materials*, 27, 3453-3459.  
“Thin Film Thermoelectric Metal-Organic Framework with High Seebeck Coefficient and Low Thermal Conductivity”
3. M.D. Allendorf, M.E. Foster, F. Léonard, V. Stavila, P.L. Feng, F.P. Doty, K. Leong, E.Y. Ma, S.R. Johnston, A.A. Talin. *J. Phys. Chem. Lett.*, **2015**, 6 (7), pp 1182-1195.  
“Guest-Induced Emergent Properties in Metal-Organic Frameworks”
4. A.A. Talin, A. Centrone, A.C. Ford, M.E. Foster, V. Stavila, P. Haney, R.A. Kinney, V. Szalai, F. El Gabaly, H.P. Yoon, F. Leonard, M.D. Allendorf, *Science*, **2014**, 343, 66–69.  
“Tunable Electrical Conductivity in Metal-Organic Framework Thin-Film Devices”
5. N. Verdal, J.-H. Her, V. Stavila, A.V. Soloninin, O.A. Babanova, A.V. Skripov, T.J. Udovic, J.J. Rush, *Journal of Solid State Chemistry*, **2014**, 212, 81-91.  
“Complex high-temperature phase transitions in Li<sub>2</sub>B<sub>12</sub>H<sub>12</sub> and Na<sub>2</sub>B<sub>12</sub>H<sub>12</sub>”
6. T.J. Udovic, M. Matsuo, A. Unemoto, N. Verdal, V. Stavila, A.V. Skripov, J.J. Rush, H. Takamure, S. Orimo, *Chemical Communications*, **2014**, 50, 3750-3752.  
“Sodium superionic conduction in Na<sub>2</sub>B<sub>12</sub>H<sub>12</sub>”
7. N. Sun, P. Ramakrishnan, A. Socha, K.M. Holtman, D.J. Yelle, T. Morgan, V. Stavila, J. Pelton, H. Blanch, B.A. Simmons, A. George, *Green Chemistry* **2014**, 16, 2546-2557.  
“Understanding pretreatment efficacy of four cholinium and imidazolium ionic liquids by chemistry and computation”
8. N. Sathitsuksanoh, K.M. Holtman, D.J. Yelle, T. Morgan, V. Stavila, J. Pelton, H. Blanch, B.A. Simmons, A. George, *Green Chemistry* **2014**, 16, 1236-1247.  
“Lignin fate and characterization during ionic liquid biomass pretreatment for renewable chemicals and fuels production”
9. V. Stavila, D.B. Robinson, Hekmaty M.A, R. Nishimoto, D.L. Medlin, S. Zhu, T.M. Tritt, P.A. Sharma, *ACS Applied Materials & Interfaces*, **2013**, 5, 6678–6686.  
“Wet-chemical synthesis and consolidation of stoichiometric bismuth telluride nanoparticles for improving the thermoelectric figure-of-merit”
10. X. Liu, E.H. Majzoub, V. Stavila, R. Bhakta, M.D. Allendorf, M. Conradi, N. Verdal, T. Udovic, *Journal of Materials Chemistry A*, **2013**, 1, 9935-9941.  
“Probing the unusual anion mobility of LiBH<sub>4</sub> confined in highly ordered nanoporous carbon frameworks via solid state NMR and quasielastic neutron scattering”
11. I. Ellern, A. Vankatasubramanian, J.H. Lee, P.J. Hesketh, V. Stavila, A. Robinson, M.D. Allendorf, *Micro and Nano Letters*, **2013**, 8, 766–769.  
“HKUST-1 coated piezoresistive microcantilever array for volatile organic compound sensing”

12. A.V. Skripov, O.A. Babanova, A.V. Soloninin, V. Stavila, N. Verdal, T.J. Udovic, J.J. Rush, *Journal of Physical Chemistry C*, **2013**, 117, 25961-25968.  
“Nuclear magnetic resonance study of atomic motion in  $A_2B_{12}H_{12}$  ( $A = Na, K, Rb, Cs$ ): Anion reorientations and  $Na^+$  mobility”
13. P.J. Cappillino, K.M. Hattar, B.G. Clark, V. Stavila, J. Sugar, D.B. Robinson, *Journal of Materials Chemistry A*, **2013**, 1, 602-610.  
“Synthesis of mesoporous palladium with tunable porosity and demonstration of its thermal stability by in situ heating and environmental transmission electron microscopy”
14. R.L. Davidovich, D.V. Marinin, V. Stavila, K.H. Whitmire, *Coordination Chemistry Reviews*, **2013**, 257, 3074–3088.  
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15. A. Eichorst, P. Varanasi, V. Stavila, M. Zemla, M. Auer, S. Singh, B.A. Simmons, *Environmental Microbiology* **2013**, 15, 2573-2587.  
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16. A.M. Socha, S.P. Plummer, V. Stavila, B.A. Simmons, S. Singh, *Biotechnology for Biofuels*, **2013**, 6, 61, DOI: 10.1186/1754-6834-6-61.  
“Comparison of sugar content for ionic liquid pretreated Douglas-fir woodchips and forestry residues”
17. A.G. Cruz, C. Scullin, C. Mu, G. Cheng, V. Stavila, P. Varanasi, D.Y. Xu, J. Mentel, Y.D. Chuang, B.A. Simmons, S. Singh, *Biotechnology for Biofuels*, **2013**, 6, 52, DOI: 10.1186/1754-6834-6-52.  
“Impact of high biomass loading on ionic liquid pretreatment”
18. N. Sun, H. Liu, N. Sathitsuksanoh, A. George, V. Stavila, B.A. Simmons, S. Singh, *Biotechnology for Biofuels*, **2013**, 6, 39, DOI: 10.1186/1754-6834-6-39.  
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19. J.A. Perez-Pimienta, M.G. Lopez-Ortega, P. Varanasi, C. Scullin, G. Cheng, V. Stavila, B.A. Simmons, S. Singh, *Bioresource Technology*, **2013**, 127, 18-24.  
“Comparison of the impact of ionic liquid pretreatment on recalcitrance of agave bagasse and switchgrass”
20. V. Stavila, R.K. Bhakta, T.M. Alam, E.H. Majzoub, M.D. Allendorf, *ACS Nano*, **2012**, 6, 9807-9817.  
“Reversible Hydrogen Storage by  $NaAlH_4$  Confined within a Titanium-Functionalized MOF-74(Mg) Nanoreactor”
21. G. Cheng, P. Varanasi, R. Arora, C. Scullin, V. Stavila, B.A. Simmons, S. Singh, *Journal of Physical Chemistry B*, **2012**, 116, 10049-10054.  
“Impact of ionic liquid pretreatment conditions on cellulose crystalline structure using 1-ethyl-3-methylimidazolium acetate”
22. H. Liu, G. Cheng, M. Kent, P. Varanasi, V. Stavila, B.A. Simmons, S. Singh, *Journal of Physical Chemistry B*, **2012**, 116, 8131–8138.  
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23. V. Stavila, J. Volponi, A.M. Katzenmeyer, M.C. Dixon, M.D. Allendorf, *Chemical Science*, **2012**, 3, 1531–1540.

- "Kinetics and Mechanism of Metal-Organic Thin Film Growth: Systematic Investigation of HKUST-1 Deposition on QCM Electrodes"
24. A.L. Robinson, V. Stavila, T.R. Zeitler, M.I. White, S.M. Thornberg, J.A. Greathouse, M.D. Allendorf, *Analytical Chemistry*, **2012**, 84, 7043-7051.  
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25. A. Vankatasubramanian, J.H. Lee, V. Stavila, A. Robinson, M.D. Allendorf, P.J. Hesketh, *Sensors and Actuators B: Chemical*, **2012**, 168, 256–262.  
"MOF@MEMS: Design Optimization for High Sensitivity Chemical Detection"
26. R.K. Bhakta, S. Maharrey, V. Stavila, E.H. Majzoub, M.D. Allendorf, *Physical Chemistry Chemical Physics*, **2012**, 14, 8160–8169.  
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27. D. Banga, J.L. Lensch-Falk, D.L. Medlin, V. Stavila, N.Y.C. Yang, D.B. Robinson, P.A. Sharma, *Crystal Growth & Design*, **2012**, 12, 1347–1353.  
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28. J.L. Lensch-Falk, D. Banga, P.E. Hopkins, D.B. Robinson, V. Stavila, P.A. Sharma, D.L. Medlin, *Thin Solid Films*, **2012**, 520, 6109–6117.  
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29. P.J. Cappillino, J.D. Sugar, M.A. Hekmaty, B.W. Jacobs, V. Stavila, P.G. Kotula, J.M. Chames, N.Y. Yang, D.B. Robinson, *Journal of Materials Chemistry*, **2012**, 22, 14013–14022.  
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